rim" be substituted for the phrase "the outer rim". Applicant has amended claim 13 to delete the word "an". Applicant has also amended claim 20 to delete the word "the" so that the phrase at issue now reads "outer rim". Applicant believes these amendments satisfy the examiner's objections.

In paragraphs 3 and 4 of the action, the examiner rejected claims 1-4, 6-7, 13-16, and 20-22 under 35 U.S.C. 103(a) as being unpatentable over Black et al. (US 6,494,305) in view of Heckman (US 4,708,066).

The examiner cited Black et al. for a mounting apparatus for attaching a transponder, which serves as an RF tag, to a conveyor trolley having a wheel, but acknowledged that Black et al. does not fairly suggest that the mounting apparatus having a recess formed between the hub and the outer rim wherein the block being shaped to be received within the recess. The examiner, however, cites Heckman as teaching a wheel having a hub, an outer rim, and a web connecting the outer rim to the hub, wherein the web comprises a plurality of spokes separated by openings, the spokes having a thickness less than the thickness of the outer rim and a recess formed between the hub and the outer rim. The examiner then concludes that it would have been obvious to incorporate the recess between the hub and the outer rim of Heckman into Black et al., such that the block containing the transponder/RF tag of Black et al. was secured within the recess of Heckman to prevent separation, loosening, or falling of the block, and, thus providing Black et al. a more secure, compact, and aesthetic system.

Applicant respectfully points out, however, that Heckman, although disclosing wheels, does not disclose a transponder/RF tag or anything remotely similar thereto. Heckman discloses a vehicle that can be used on both train rails and the highway. The

"tag assembly 22" of Heckman is rear rail guide wheel (Col. 2, line 44) adapted for assembly with and associated spare road wheel 24 mounted in coaxial alignment with a rail wheel 23 and moveable in response to up and down movement of the tag assembly 22. (Col. 3, ll. 4-9) The recessed web section 55 referenced by the examiner is integrally secured to the hub plate 53 of the spare road wheel 24 that is mounted in coaxial alignment with the rail wheel 23 that is part of the tag assembly 22. (Col. 3, ll. 54-59) Thus, the "tag assembly" of Heckman is just a wheel assembly – *i.e.*, a rear rail guide wheel surrounded by a spare road wheel that, in turn, has a recessed web section; it is not an RF tag or transponder. Moreover, nothing similar to a transponder/RF tag is mounted in or about the recessed web section of the spare road wheel, much less mounted therein for protection from separation, loosening, or falling.

Black et al. and Heckman are disparate references. Heckman does not teach the use of a recess for any transponder, tag, or any identification purposes at all. Nothing in Heckman or Black et al. suggests that these references be combined. Thus, it is submitted that is improper to combine these references – *i.e.*, to do so would be hindsight reconstruction, there being absolutely no suggestion in either reference to combine them.

In paragraph 5 of the action, the examiner rejects claims 8-9, 11-12, 17-19 and 23 under 35 U.S. C. 103(a) as being unpatentable over Black et al. as modified by Heckman in the same manner as applied by the examiner with respect to claims 1, 4, and 13. Here, the examiner notes that Black et al. as modified by Heckman fails to teach or fairly suggest that the block is securable to the web of the wheel by a clamping member that is a second block of material, but suggests that Mitchell (US 3,708,847) teaches the use of a clamping means comprising four clamp plates secured to spokes of the web of a wheel

via a recess, and, thus, that it would have been obvious to incorporate the clamping member of Mitchell into Black/Heckman to provide Black/Heckman with a more secure system to hold/secure the block containing/having the tag to the wheel so as to prevent separation of the block from the wheel.

As noted above by Applicant, Black et al. and Heckman are disparate references that cannot properly be combined.

Mitchell discloses a method for mounting pneumatic tires on vehicle wheels. A bead portion 16 of the wheel well 6 forms a means by which the rim and tire assembly may be demountably secured to the wheel center by incorporating clamp means 18 to engage the bead portion 16. The clamping means 18 comprises four clamp plates 22 secured to one end of each wheel spoke 20 to engage the outer side of the bead portion 16 of the wheel well portion 6 so as to grip the bead portion 16 between the clamp plate and the spoke in the manner of vice-jaws. Mitchell does not teach the use of a recess for any transponder, tag, or any identification purposes. It simply teaches the use of a clamp to grip a bead portion of the well of a wheel to which a rim and tire assembly may be mounted. There is no suggestion in Mitchell to combine it with Black et al. or Heckman, nor any suggestion in Black et al. or Heckman to combine either with Mitchell so as to prevent an RF tag/responder from separating, falling, or loosening.

Thus, Applicant respectfully submits that it would not have been obvious to incorporate the clamping member of Mitchell with Black et al./Heckman to provide a more secure system to secure a block containing a RF Tag/transponder. Here again, to combine these references would be improper hindsight reconstruction.

In paragraph 6 of the action, the examiner rejects claims 5 and 10 under 35 U.S.C. 103(a) as being unpatentable over Black et al. as modified by Heckman as applied to claims 1 and 4 (discussed above) in view of Hoffman et al. (US 5,156,533). The examiner acknowledges that Black et al./Heckman fail to teach or fairly suggest that the block is formed of plastic, but that Hoffman et al. teaches that bearing sleeves halves are made of self-lubricating plastic; thus, the examiner concludes that it would have been obvious to incorporate the use of plastic taught by Hoffman et al. into the teachings of Black et al./Heckman to form the block carrying the RF tag in order to reduce friction engagement between the conveyor trolley with the track when the trolley is moving.

Hoffman et al. discloses the use of a plastic bearing sleeve and plastic wheel on a conveyor trolley to provide a friction fit, lower parts cost, fewer parts, and ease of replaceability. (Col. 1, ll. 43-50). Hoffman et al. does not disclose a transponder, RF tag, or any other identification means mounted on a trolley wheel. The specification of the instant application states only that the RF tag be *embedded* into "a block 41 of moldable or castable material such as an epoxy, polymer, or other plastic material, and attaching the block 41 to the wheel 15 of the trolley 3" -- a matter totally different from the construction, fit, parts costs, number of parts, and replaceability of the parts of trolley wheels and sleeves. Hoffman et al. suggests nothing about RF tags or the use of indentification means on conveyor trolleys, let alone whether such tags or identification means should be embedded into blocks made of moldable or castable materials such as epoxy, polymer, or other plastic material.

For the reasons stated above, the invention of the instant application is not obvious in view of Black et al./Heckman -- Heckman containing no teaching about RF

tags or trolley identification means, and neither Black et al. nor Heckman contain any suggestion that they be combined. Similarly, Hoffman et al. contains no teaching about RF tags or trolley identification means, nor is there any suggestion in Hoffman et al. that it be combined with Black et al. or Heckman to mount a plastic block containing a transponder/RF tag within a recess in a trolley wheel to prevent separation, loosening, or falling of the block.

For all of the above reasons, Applicant thus requests that this application pass to issue.

Respectfully submitted,

David Vande Berg

By _____
Gerald M. Kraai
Reg. No. 34,854
Attorney for Applicants

Lathrop & Gage, LC
2345 Grand Boulevard, Suite 2800
Kansas City, Missouri 64108-2612
Phone: (816) 460-5338